

MASSACHUSETTS RARE AND ENDANGERED WILDLIFE

Least Tern Sterna antillarum

DESCRIPTION The Least Tern is the smallest of the four species of terns that nest in Massachusetts. It ranges from 8.5 to 9.5 in. (21.6-24.1 cm) in body length and has a wingspread of about 20 inches (50.8 cm). It is a predominately gray bird with a black capped head and nape. Its forehead is white with a black line running from its crown through its eye to the base of its bill. Its bill is orange-yellow with a black tip. Its gray wings are edged with a black strip on the primaries and the primary coverts (outer wing feathers). Its tail is deeply forked and in comparison with other terns, rather short. Its underparts are white and its legs are orange yellow. Juveniles have pinkish brown upperparts patterned with black u shaped markings and a dark shoulder bar on the wings. Its crown is sooty black and there is a black patch over its eyes. Sexes are alike in appearance, with females slightly smaller.

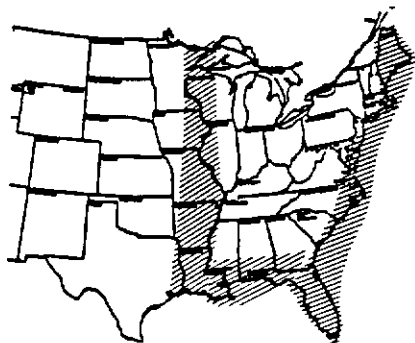


RANGE The Least Tern breeds along coastal and freshwater habitats of North, Central, and South America, and the Caribbean Islands (American Ornithological Union). In North America, the Least Tern is found along the Atlantic coast from Maine to Florida and along the Pacific coast from central California south to the Gulf Coast. It is also found along the major tributaries of the Mississippi and Missouri River drainage systems, and the Colorado and Rio Grande rivers. Although the winter range of the Least Tern is not well known, a portion of the North American population winters off the northern coast of South America from Venezuela to northeastern Brazil.

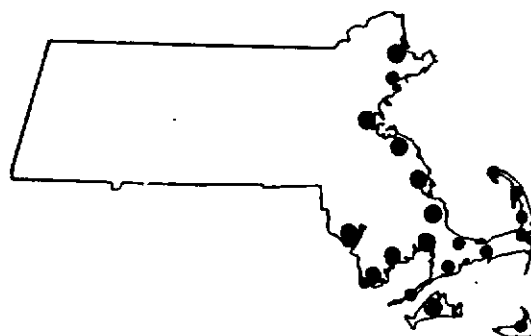
Habitat Suitability Index
Models: Least Tern. U.S.
Dept. Interior: Fish and
Wildlife Service. Aug. 1985.

HABITAT IN MASSACHUSETTS In Massachusetts, the Least Tern inhabits coastal beaches and barrier islands. It is not found inland. It nests in dry, exposed, unvegetated areas on sandbars or ocean beaches in the area between the drift line and the upland. The substrate type is usually a mixture of sand, pebbles, and shells as well as fine grained sand, and may also include dredge materials.

(Continued overleaf)



Range



- Verified since 1978
- Reported prior to 1978

Breeding Distribution in Massachusetts
by Town

FEEDING HABITS The Least Tern is an opportunistic feeder which forages on nearly any species of fish under 8 or 9 cm (3-3.7 in.) long. Most frequently it consumes small minnows, sand lance, herring, and hake. It is rarely found feeding over land. The feeding techniques exhibited by the Least Tern include hovering, diving, and skimming the surface of the water. It has been observed diving from heights of up to 10 m (34 ft).

LIFE HISTORY AND ECOLOGY Least Terns arrive on their breeding grounds around May 10. Colonies are established containing several to several hundred pairs. Courtship behavior is characterized by high speed pursuits, posturing and sweeping flight. The female Least Tern forms a shallow scrape in the sand and lays 2 to 3 cryptically colored eggs between May 23 and June 10. If the first clutch is lost to predation or storms, up to two additional clutches may be laid later in the season.

Incubation is performed by both sexes and lasts 20-23 days. The chicks are active 24-36 hours after hatching and fledge in approximately 28 days. The young are fed by both parents. Least Terns leave their breeding grounds as soon as the young fly and are seldom seen in Massachusetts past early September.

PREDATION AND DEFENSE The Least Tern is threatened by a host of avian and mammalian predators such as owls, Black Crowned Night Herons, Herring and Great Black-backed Gulls, red foxes, raccoons, skunks, house cats, and people. Several adaptive mechanisms are employed by the Least Tern to discourage predation and increase nesting success. Within the colony, synchronous egg laying establishes a brood of similarly aged young which provides some degree of safety in numbers. Following widespread predation, pairs suffering egg or chick losses will typically renest, producing a wide range of nesting stages within the colony. In the event of additional intrusions by predators, the more varied-aged chick population may be less vulnerable and less likely to experience catastrophic losses.

Other anti predator mechanisms include cryptically colored eggs and chicks who respond to danger by sinking to the ground in an attempt to blend in with the surroundings. From a distance, adults are camouflaged by their coloration. The Least Tern will attempt to discourage avian and mammalian intruders by attacking, mobbing, calling loudly, and dropping excrement.

POPULATION STATUS The Least Tern is listed by the Massachusetts Division of Fisheries and Wildlife as a Species of Special Concern. In the 1870's and 1880's, the Least Tern was a common bird in Massachusetts. At the turn of the century however, the Least Tern was heavily exploited in the millinery trade and experienced virtual eradication from the state. By the 1930's, the Least Tern had made a noticeable recovery following the Migratory Bird Treaty Act of 1818 and the Lacey Act of 1901 which made it illegal to take birds for their feathers. Since 1930, populations have fluctuated between 800 and 2500 breeding pairs. Censuses from 1987 reported 2109 pairs from 41 stations in Massachusetts, an 8% decline from the previous year.

Several important factors are attributed to reproductive failure in northeastern populations. Predation, loss of nesting habitat to natural disaster, development and human activity have all taken a toll on this species. Victimization by predators may prevent nesting from taking place and can force the Least Tern to abandon traditional nest sites.

Given its affinity for nesting on sandbars, this bird frequently loses its nests during exceptionally high tides or storms. Erosion of nests is more likely in soils consisting solely of sand. Impermeability of finer grained soils causes egg loss during periods of high rainfall. More frequently however, suitable habitat is lost to development and nests and eggs are destroyed by Off Road Vehicles and beach goers.